

PATENT CLAIMS:

1 – 11 (canceled)

12. (new) An oxidation resistant component, comprising:
a substrate; and
a protective layer, comprising:

an intermediate MCrAlY layer on the substrate having a composition
(in wt%) 10% – 50% Co, 10% – 40% Cr, 6% – 15% Al, 0,02% – 0,5% Y, Ni base;

an outer layer which has a phase γ -Ni structure and has the
composition (in wt%): 15 - 40% Cr, 5 - 80% Co, 3 - 6.5% Al and Ni base and has a
content of Aluminum of up to 6.5wt% and consists of pure γ -Ni phase wherein the
outer layer zone is arranged on the intermediate MCrAlY layer and M is an element
selected from the group consisting of Co, Fe, and Ni.

13. (new) The component according to claim 12 wherein the intermediate layer
is located near the substrate.

14 (new) The component according to claim 12, wherein the protective layer
consists of two separated layers.

15. (new) The component according to claim 12, wherein a continuously graded
concentration of the composition of the intermediate and outer layer is located inside the
protective layer.

16. (new) The component according to claim 12, wherein the outer layer is
thinner than the intermediate layer on or near the substrate.

17. (new) The component according to claim 12, wherein the intermediate
MCrAlY-layer or the outer layer contains a further element selected from the group
consisting of (in wt%): 0.1% - 2% Si, 0.2% - 8% Ta, and 0.2% - 5% Re.

18. (new) The component according to claim 12, wherein the Yttrium of MCrAlY of the intermediate MCrAlY layer or the outer layer is added or replaced by an element from the group consisting of Hf, Zr, La, Ce, and other elements of the Lanthanide group.

19. (new) The component according to claim 12, wherein the Yttrium of MCrAlY of the intermediate MCrAlY layer or the outer layer is added and replaced by an element from the group consisting of Hf, Zr, La, Ce, and other elements of the Lanthanide group.

20. (new) The component according to claim 12, wherein the outer layer has the composition (in wt%): 20 – 30% Cr, 10 – 30% Co, 5 – 6% Al and Ni base.

21. (new) The component according to claim 12, wherein the MCrAlY layer contains Ti (Titanium) or Sc (Scandium).

22. (new) The component according to claim 12, wherein the MCrAlY layer contains Ti (Titanium) and Sc (Scandium).

23. (new) The component according to claim 12, wherein a thermal barrier coating is applied to the outer layer.

24. (new) The component according to claim 17, wherein the rhenium content is between 0.2 and 2wt%.

25. (new) The component according to claim 23, wherein a heat treatment prior to applying a thermal barrier coating is carried out in an atmosphere with a low oxygen partial pressure in the range of 10^{-7} to 10^{-15} bar.

26. (new) The component according to claim 12, wherein the component is a turbine component with application in a gas turbine.

27. (new) An oxidation resistant turbine component for use in a gas turbine, comprising:
- a substrate; and
 - a protective layer, comprising:
 - an intermediate MCrAlY layer on the substrate having a composition (in wt%) 10% – 50% Co, 10% – 40% Cr, 6% – 15% Al, 0,02% – 0,5% Y, Ni base;
 - an outer layer which has a phase γ -Ni structure and has the composition (in wt%): 15 - 40% Cr, 5 - 80% Co, 3 - 6.5% Al and Ni base and has a content of Aluminum of up to 6.5wt% and consists of pure γ -Ni phase wherein the outer layer zone is arranged on the intermediate MCrAlY layer and M is an element selected from the group consisting of Co, Fe, and Ni.
28. (new) The component according to claim 27, wherein the intermediate MCrAlY-layer or the outer layer contains a further element selected from the group consisting of (in wt%): 0.1% - 2% Si, 0.2% - 8% Ta, and 0.2% - 5% Re.
29. (new) The component according to claim 27, wherein the Yttrium of MCrAlY of the intermediate MCrAlY layer or the outer layer is added or replaced by an element from the group consisting of Hf, Zr, La, Ce, and other elements of the Lanthanide group.
30. (new) The component according to claim 27, wherein the outer layer has the composition (in wt%): 20 – 30% Cr, 10 – 30% Co, 5 – 6% Al and Ni base.